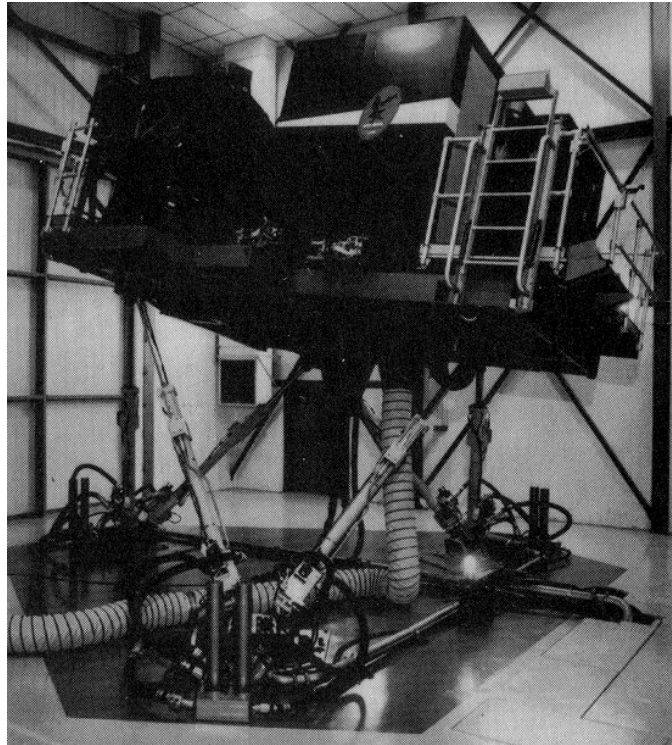# Overview

- **Teleoperation of Remote Equipment (Physically Distant or Dangerous)**
- **Scientific Visualization**
- **Architectural Walkthroughs/Flythroughs of Geographic Areas**
- **Collaboration**
- **Training and Rehearsal Through Simulation (Medical, Military, Firefighting, etc.)**
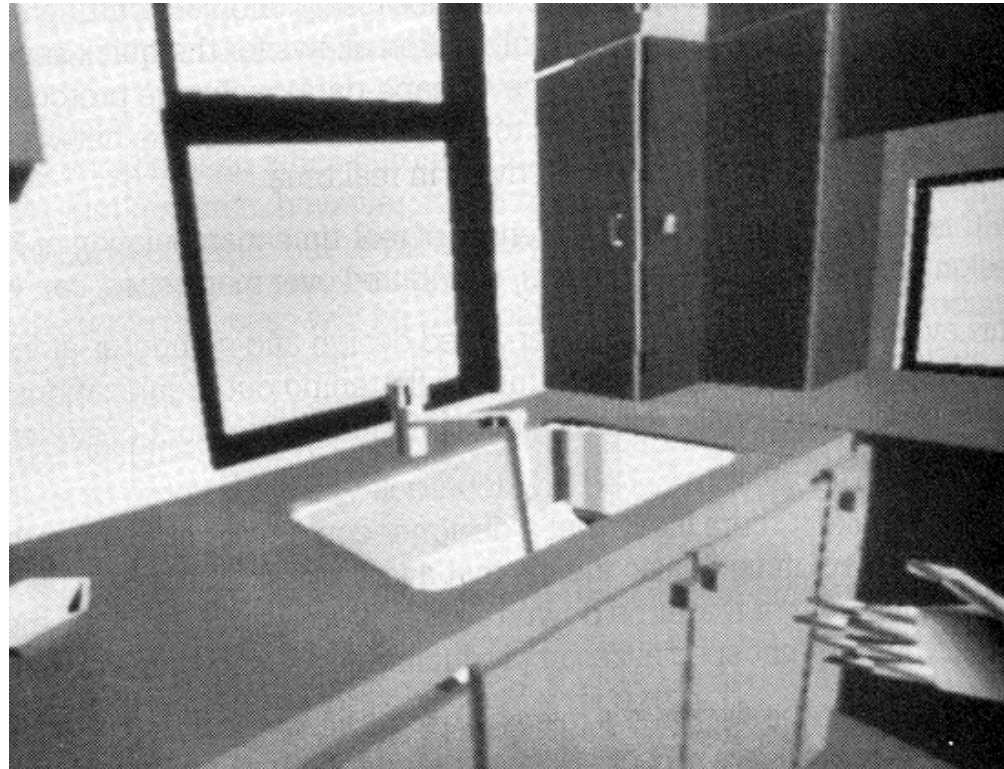- **Entertainment**

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Applications

Flight Simulation

**Blackhawk helicopter flight simulator
Motion platform**

Design

VPL Kitchen

The Virtual Windtunnel
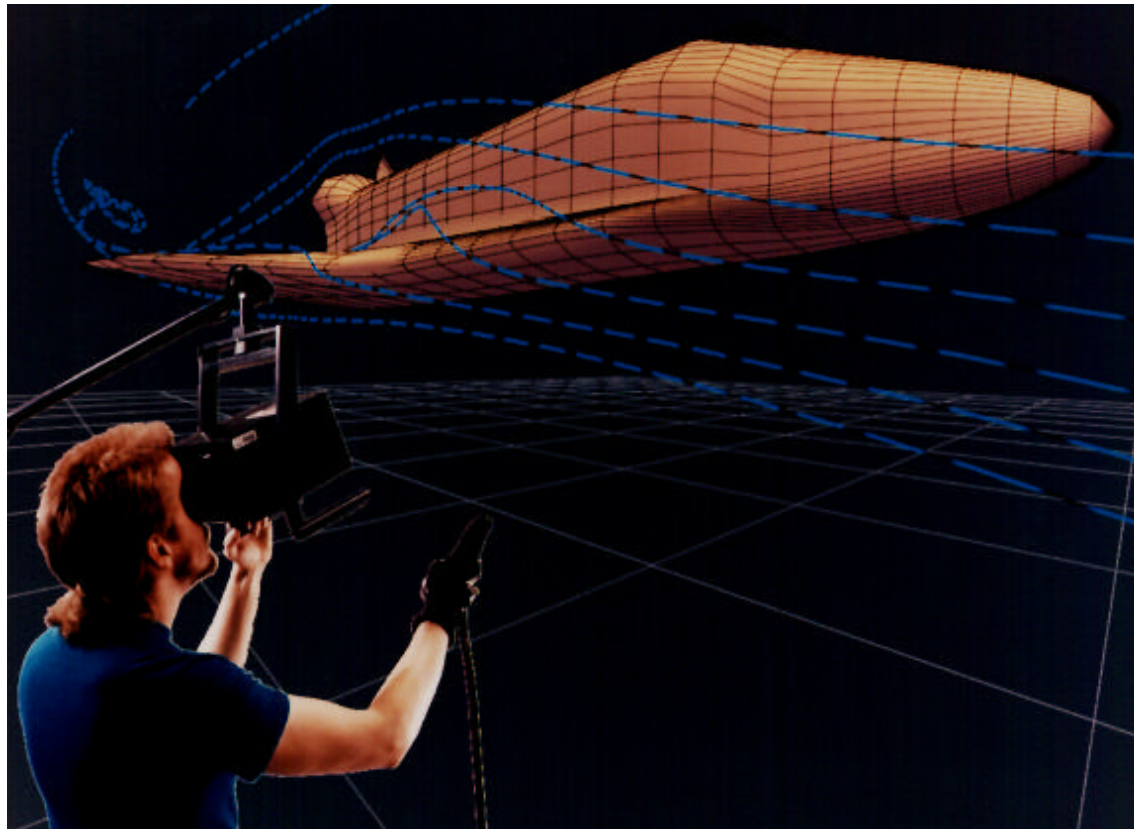
NASA Ames Research Center

Introduction to
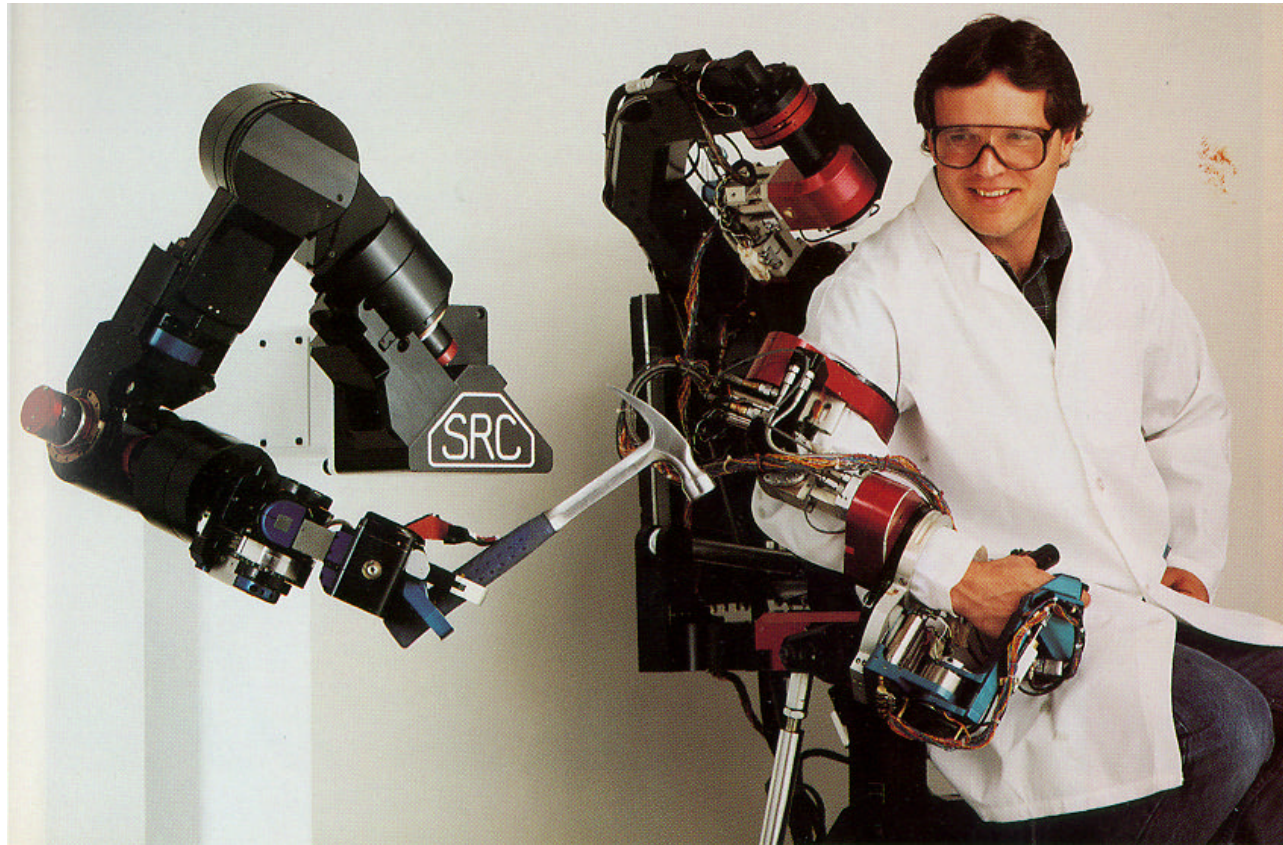Virtual Environment Technology
Applications

Mechanical Maintenance
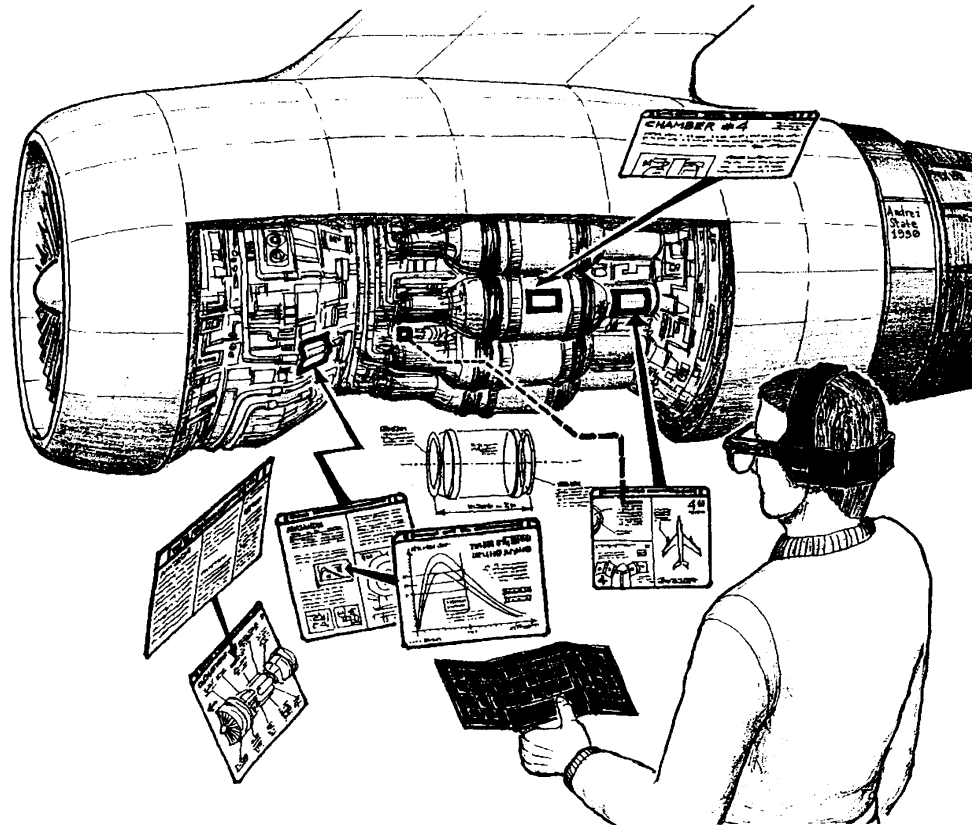
Boeing Aircraft

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Applications

Telerobotics

Telesurgery/Augmented Surgery

Augmented Reality

Windows on the World

Architectural Anatomy

Crossbox Testbed
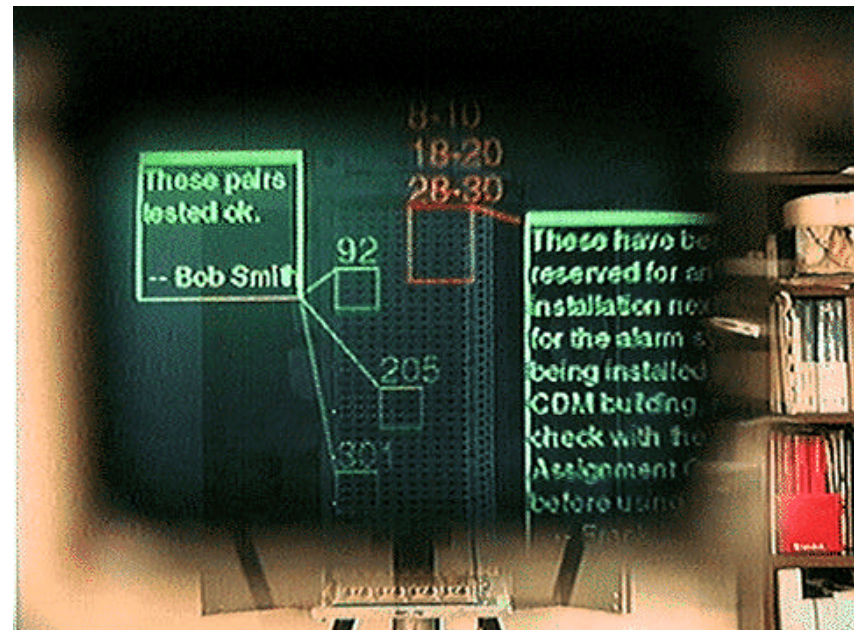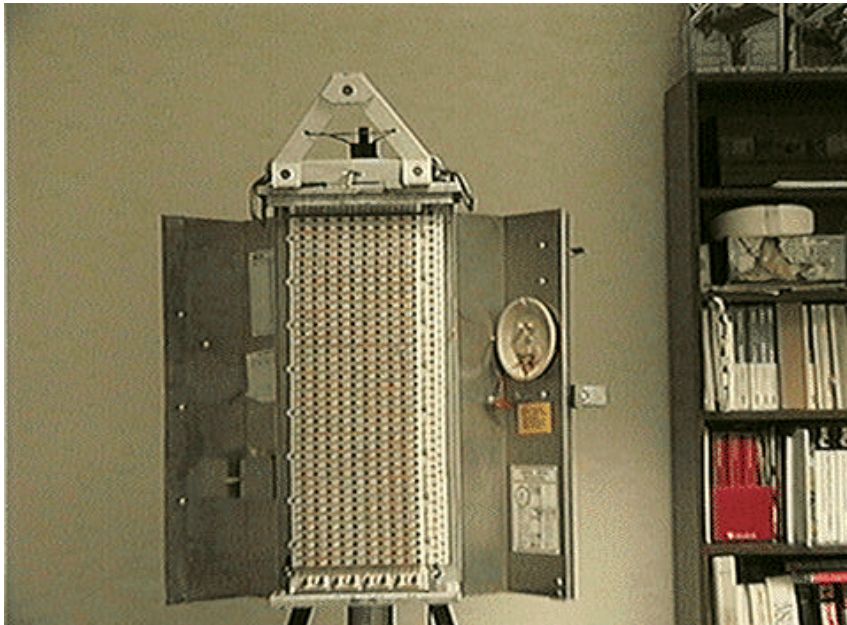
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Battle Tech

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Applications
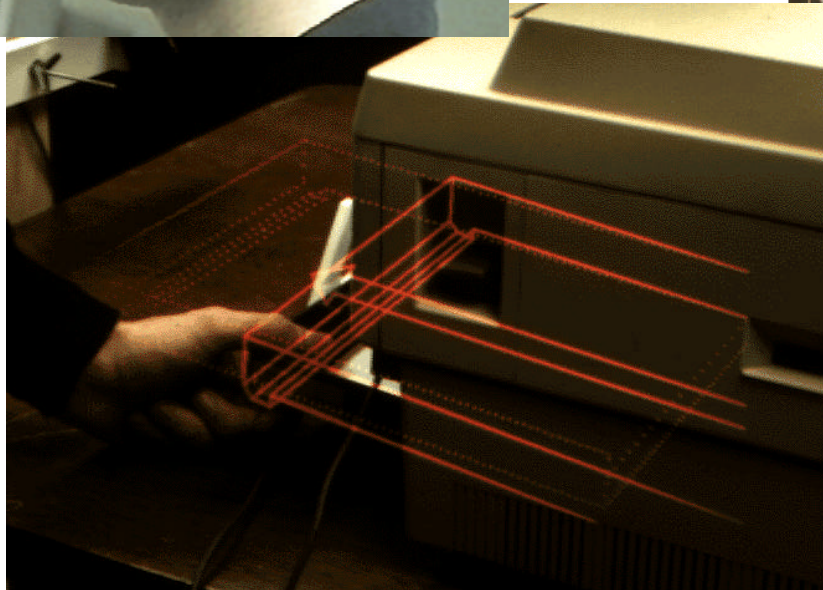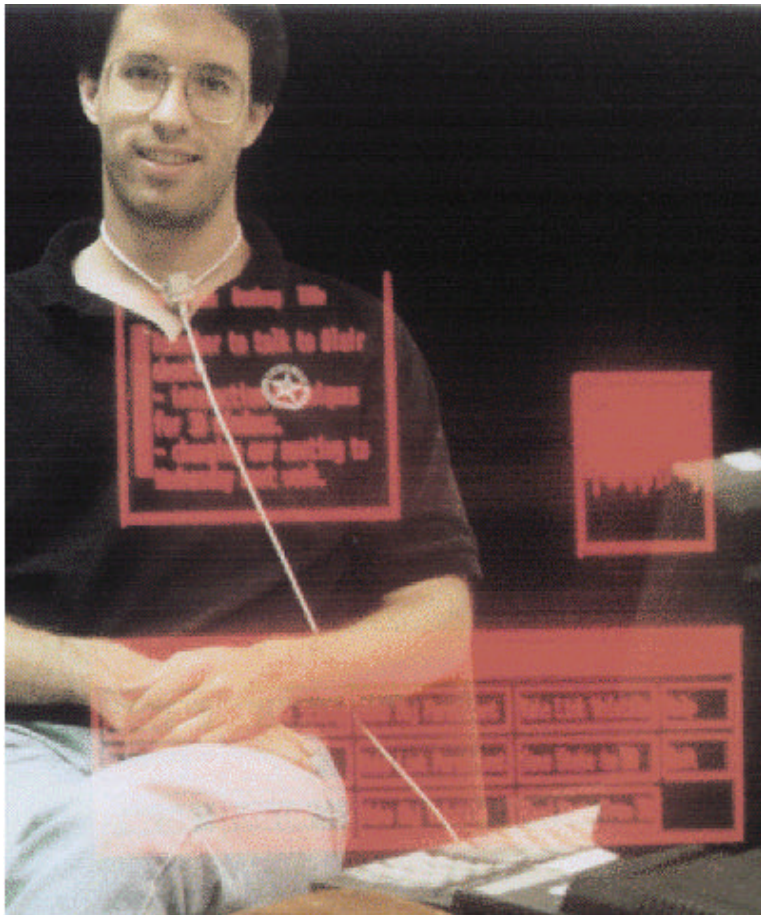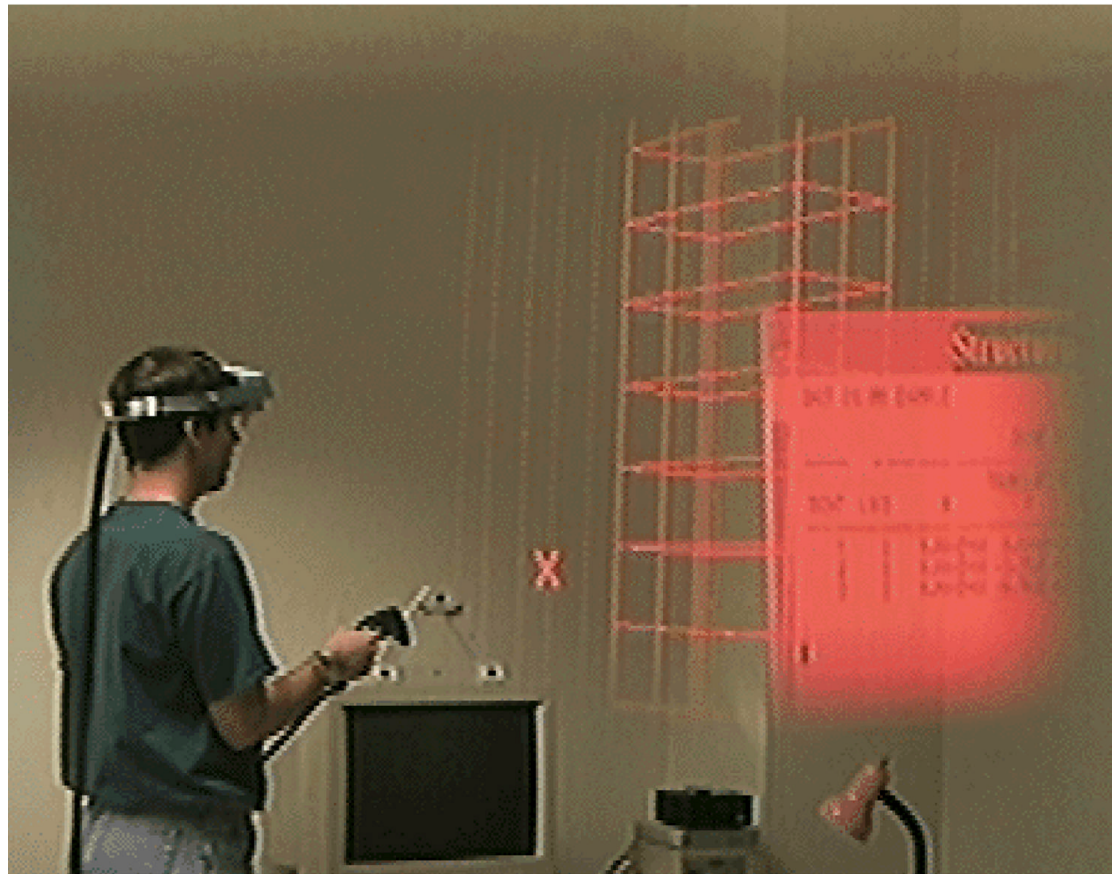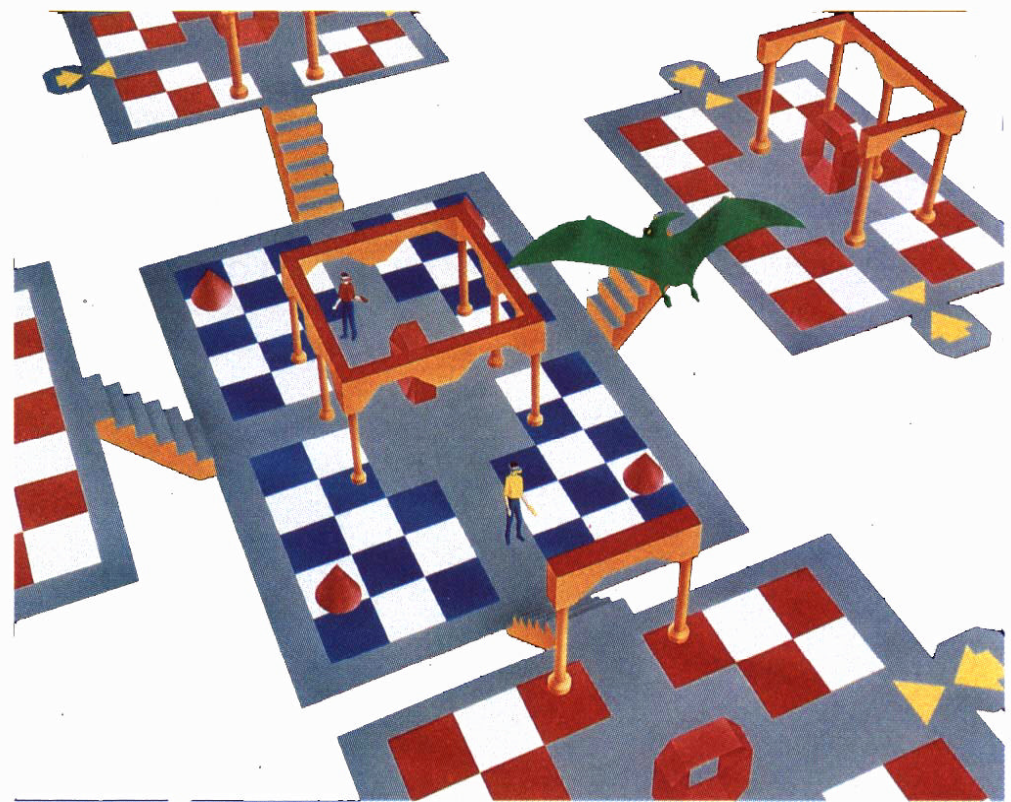
Virtuality
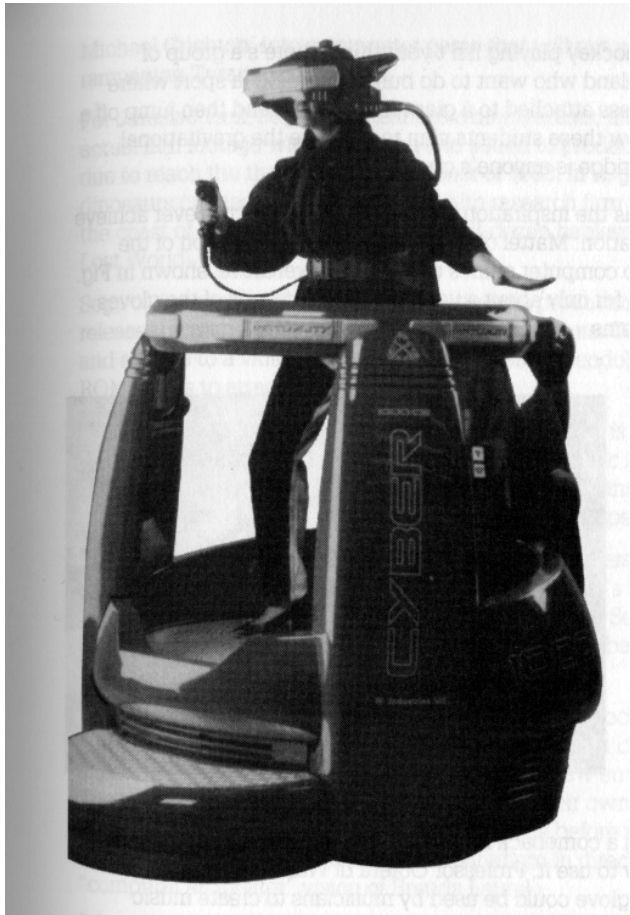
Super Mario 64

Case Study 0

- **Put That There**
- **What is the purpose of this system?**
- **What are reasonable performance goals?**
- **How would we test this system's efficiency?**

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Applications

Case Study 1

- **Officer of the Deck task**
- **What is the purpose of this system?**
- **What are reasonable training goals?**
- **How would we test if this system trains anything?**

Case Study 2

- **Navigation Trainer**
- **What is the purpose of this system?**
- **What are reasonable training goals?**
- **How would we test if this system trains anything?**

Case Study 3

- **Locomotion Devices**
- **What is the purpose of this system?**
- **What are reasonable performance goals?**
- **How would we test this system's efficiency?**

Case Study 4

- **Hand Devices**
- **What is the purpose of this system?**
- **What are reasonable performance goals?**
- **How would we test this system's efficiency?**

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Research Opportunities

- **Software**
- **Hardware**
- **Interfaces**
- **Communications/Networking**
- **Evaluation**
- **Applications**